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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,934	04/14/2004	James F. Stelzer	WSTR 8465	5288
321	7590	02/01/2006	EXAMINER	
SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			PHAM, MINH CHAU THI	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/823,934

Applicant(s)

STELZER ET AL.

Examiner

Minh-Chau T. Pham

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-22 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Shohet et al (3,449,891), in view of either Wang (2005/0126137 A1) or Percy (4,704,143).

Shohet et al disclose an air induction system for an engine of an aircraft to receive intake air, remove contaminants from the intake air, and provide the intake air for delivery to the engine comprising a housing (66) having a hollow interior with at least one entryway (36) for receiving intake air to the housing (66), a contaminant separator (24, 26) for removing contaminants from the air, and an exit for discharge of air from the housing, a duct (50) positioned adjacent the exit of the housing (66) to receive intake air therefrom for delivering the air to the engine (see details of Fig. 2, col. 5, line 51 through col. 6, line 10), a seal (118) positioned between the housing and the duct for preventing passage of air therethrough (col. 6, lines 29-70). Shohet et al further disclose the housing comprising a nacelle and a frame at the back end of the nacelle with the exit wherein the front of the duct (50) is received through the opening (see details of Figs. 2, 3 & 7), an entryway comprising an opening (38) formed in the housing (66), the contaminant separator (24) being mounted across the entryway (36) and the separator having a porous media (see 24 in Fig. 2). Shohet et al also disclose the air induction system comprising a rod (252) securing the nacelle wherein the first end secured to the frame being slidably movable in a slot attached to the frame and being arranged a

locking position when the nacelle swings to the open position (see col. 8, line 44 through col. 9, line 44). Claims 1-22 differ from the disclosure of Shohet et al in that the configuration of the seal between the outside of the duct and the housing such that the seal is not exposed to air flowing in the internal flow path of the duct. Wang discloses a securing binding (60) of a soft plastic material and a binding belt (70) used to bind the securing binding (60) onto the cylinder body (80), thus, an enclosed stable and air tight securing seat structure is obtained (see page 2, paragraphs 0025-0027). Percy discloses a sealing band (11) with gasket (12) closely abuts the edges of the filter elements and prevents unfiltered air from passing around the filters (see Figs. 1-3, col. 4, lines 10-14). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide an outside seal as taught by either Wang or Percy in the air induction system for an aircraft of Shohet et al since this structure of sealing would promote tight connection between the duct and the filter housing to achieve optimal filtration while effectively preventing any air bypassing.

Response to Amendment

Applicant's arguments filed on November 17, 2006 have been fully considered but they are not persuasive.

Applicant argues that none of the cited references Shohet et al or Jaroszczyk et al discloses "the system having the seal disposed between the outside of the duct and the housing". The Examiner still maintains Shohet et al as the primary reference and now drops the secondary reference Jaroszczyk et al, and newly introduces Wang or Percy as the secondary references in combination with Shohet et al to show: Wang discloses

a securing binding (60) of a soft plastic material and a binding belt (70) used to bind the securing binding (60) onto the cylinder body (80), thus, an enclosed stable and air tight securing seat structure is obtained (see page 2, paragraphs 0025-0027). Percy discloses a sealing band (11) with gasket (12) closely abuts the edges of the filter elements and prevents unfiltered air from passing around the filters (see Figs. 1-3, col. 4, lines 10-14). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide an outside seal as taught by either Wang or Percy in the air induction system for an aircraft of Shohet et al since this structure of sealing would promote tight connection between the duct and the filter housing to achieve optimal filtration while effectively preventing any air bypassing.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, the sealing device of either Wang or Percy is well-known in the art that this type of sealing device provides an enclosed stable and air tight securing seat structure is obtained (see page 2, paragraphs 0025-0027), as disclosed by Wang, or a sealing band (11) with gasket (12) closely abuts the edges of the filter elements and

prevents unfiltered air from passing around the filters (see Figs. 1-3, col. 4, lines 10-14), as disclosed by Percy.

Applicant's arguments with respect to claims 1-22 have thoroughly been considered but are moot in view of the new ground(s) of rejection, as discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Minh-Chau Pham
Patent Examiner
Art Unit: 1724
January 30, 2006